

FIG. 1A

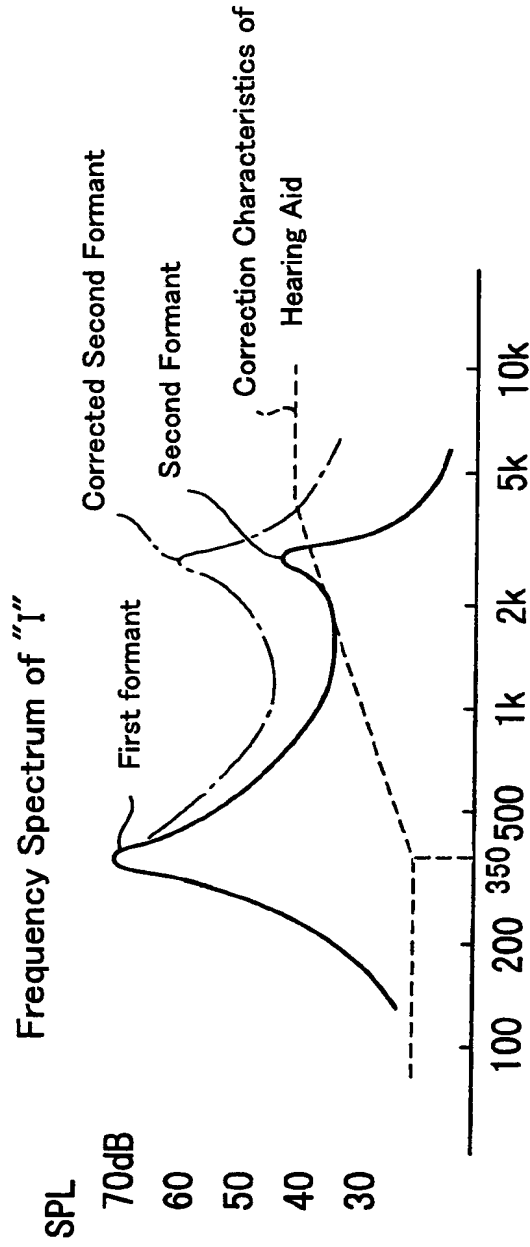


FIG. 1B

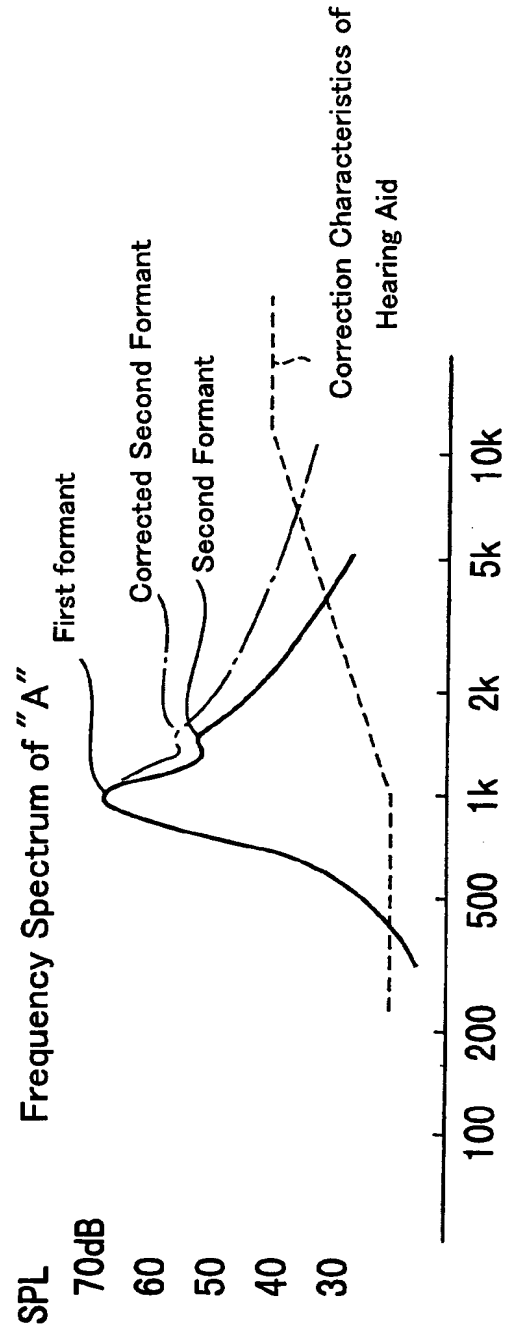


FIG. 2A

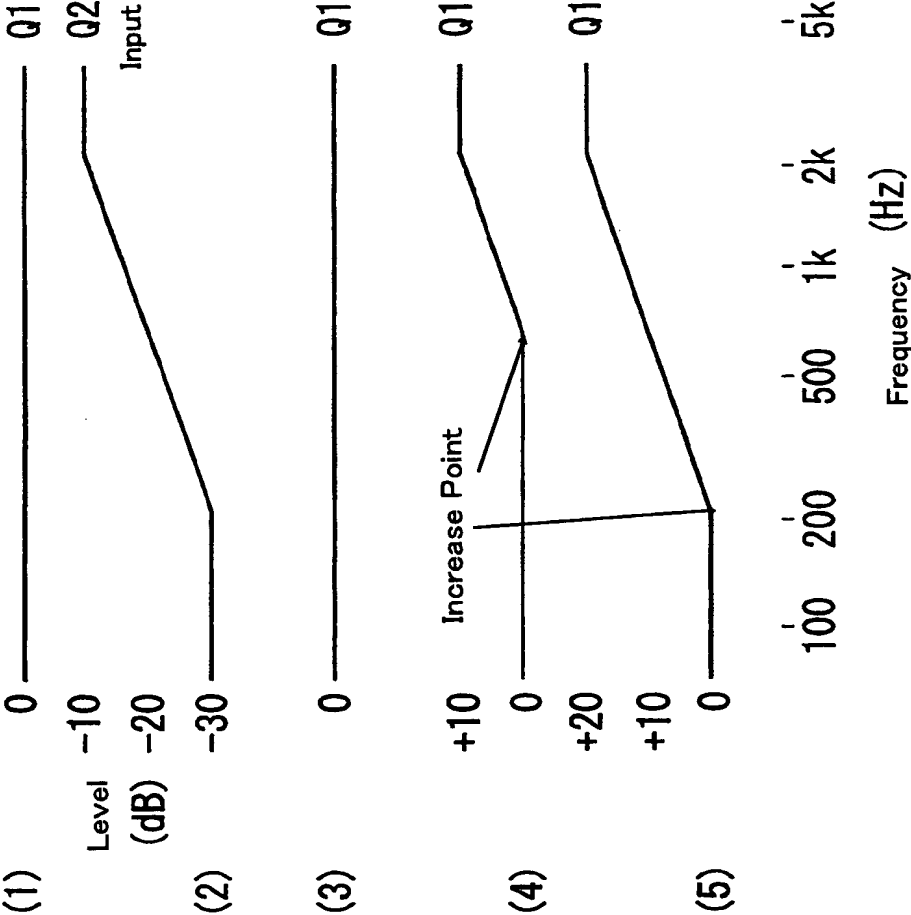


FIG. 2B

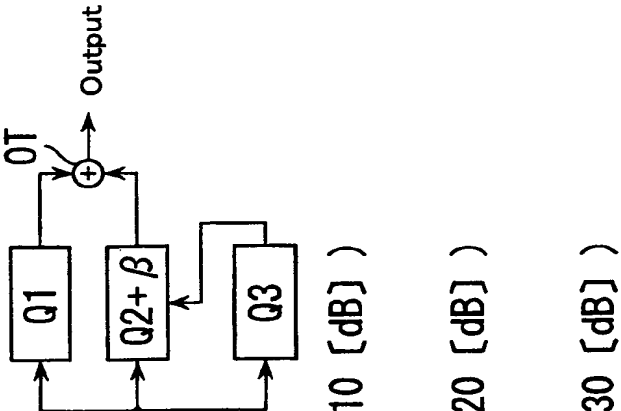


FIG. 3

First Formant Frequency Detection

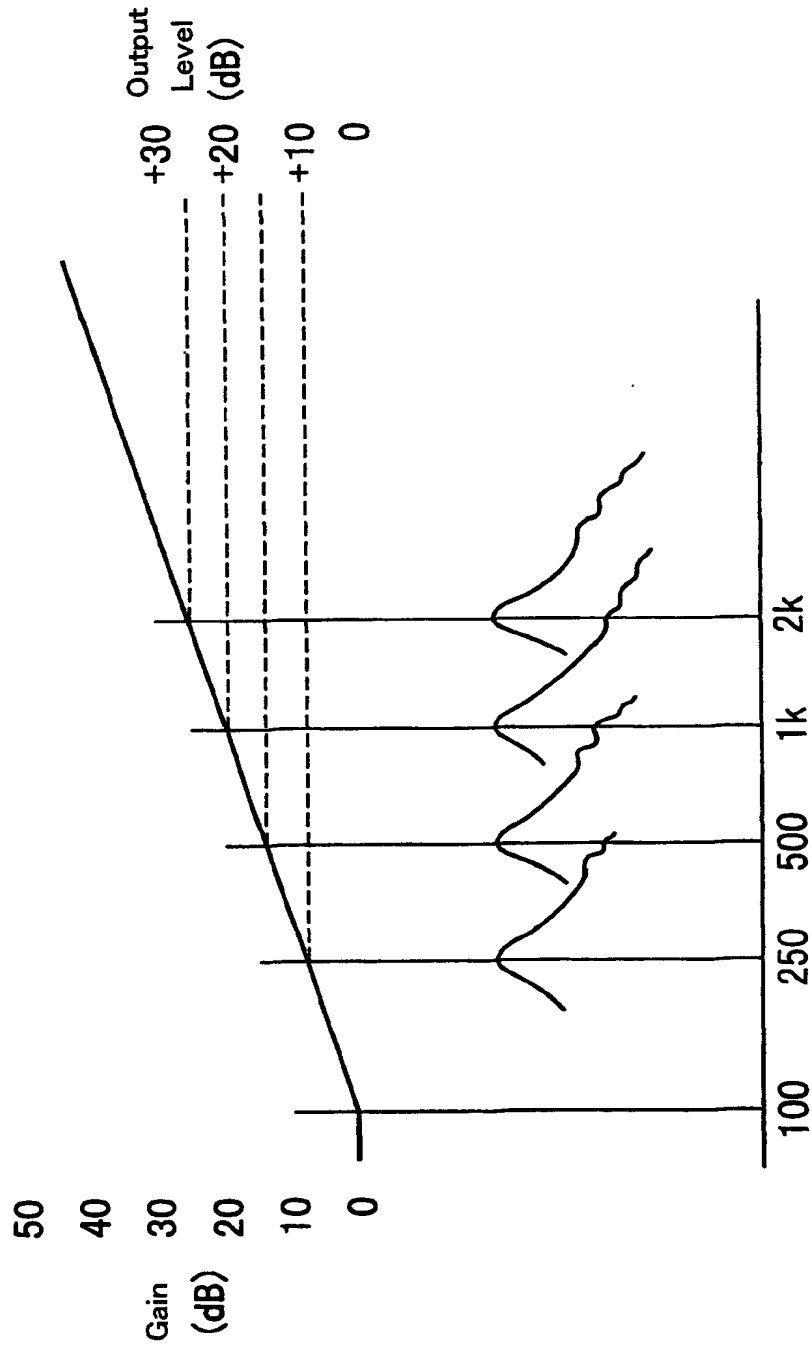


FIG. 4

Second Embodiment

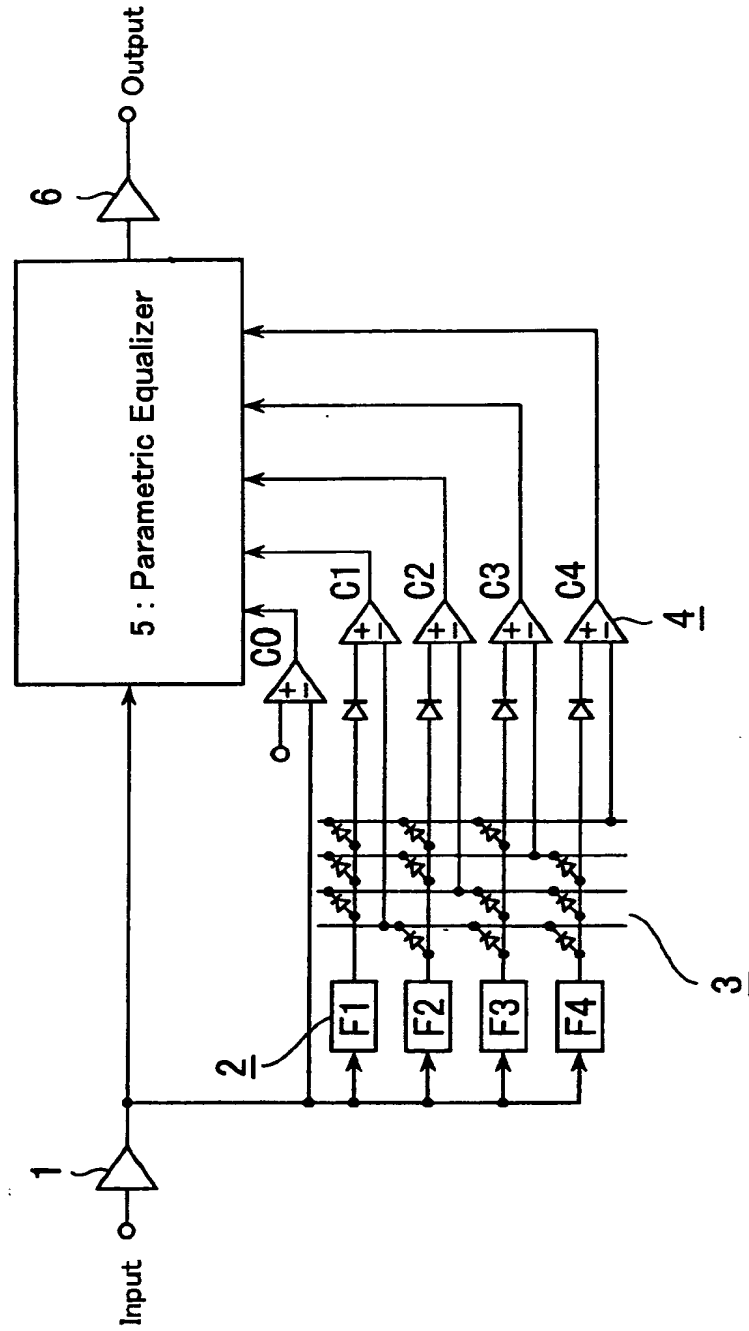


FIG. 5A

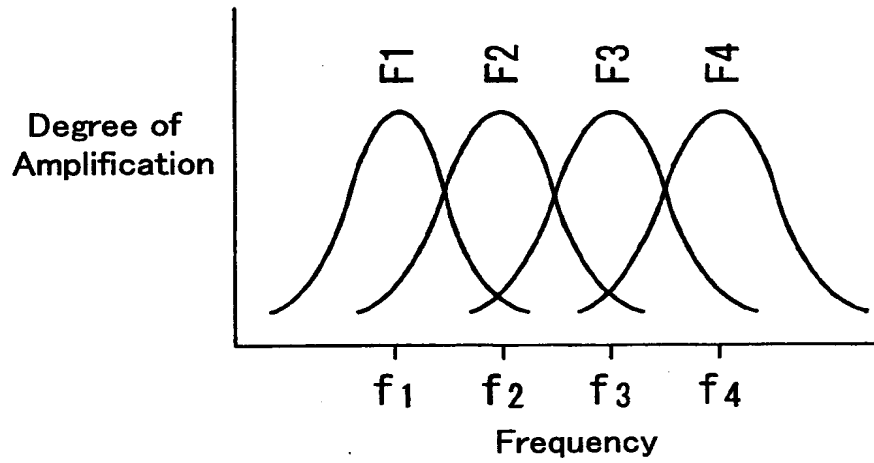


FIG. 5B

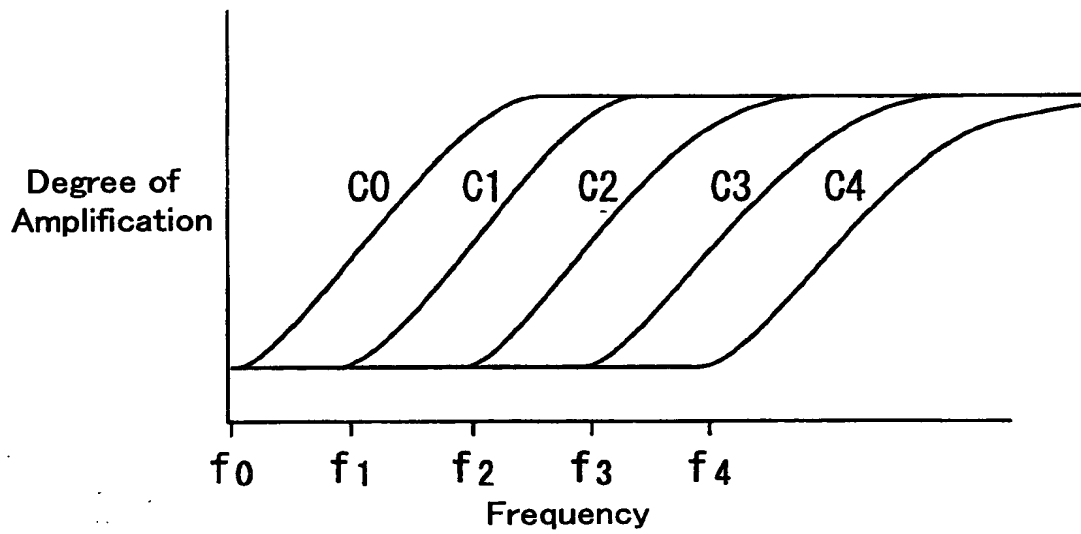


FIG. 6

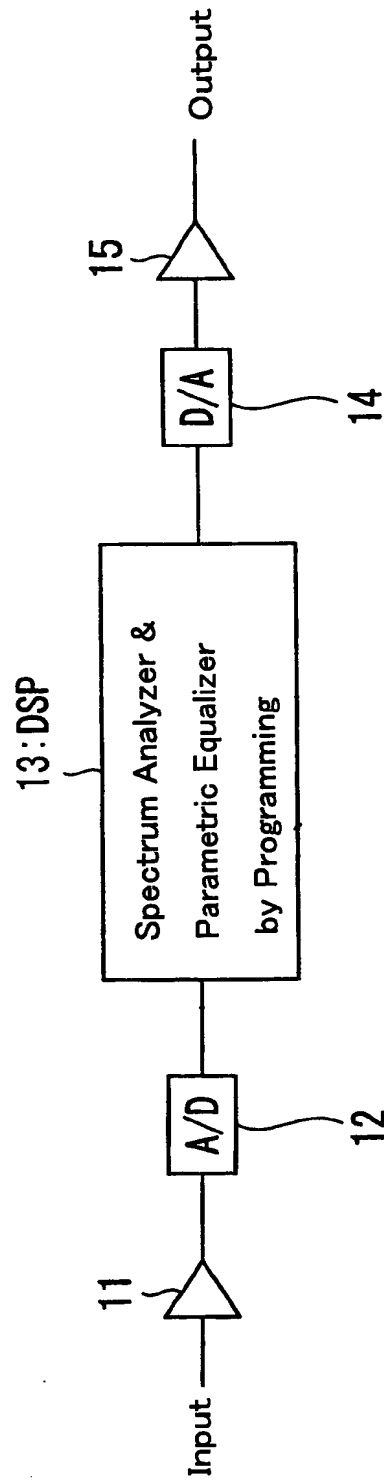


FIG. 7

Equisiganl Curves of Loudness of Sound

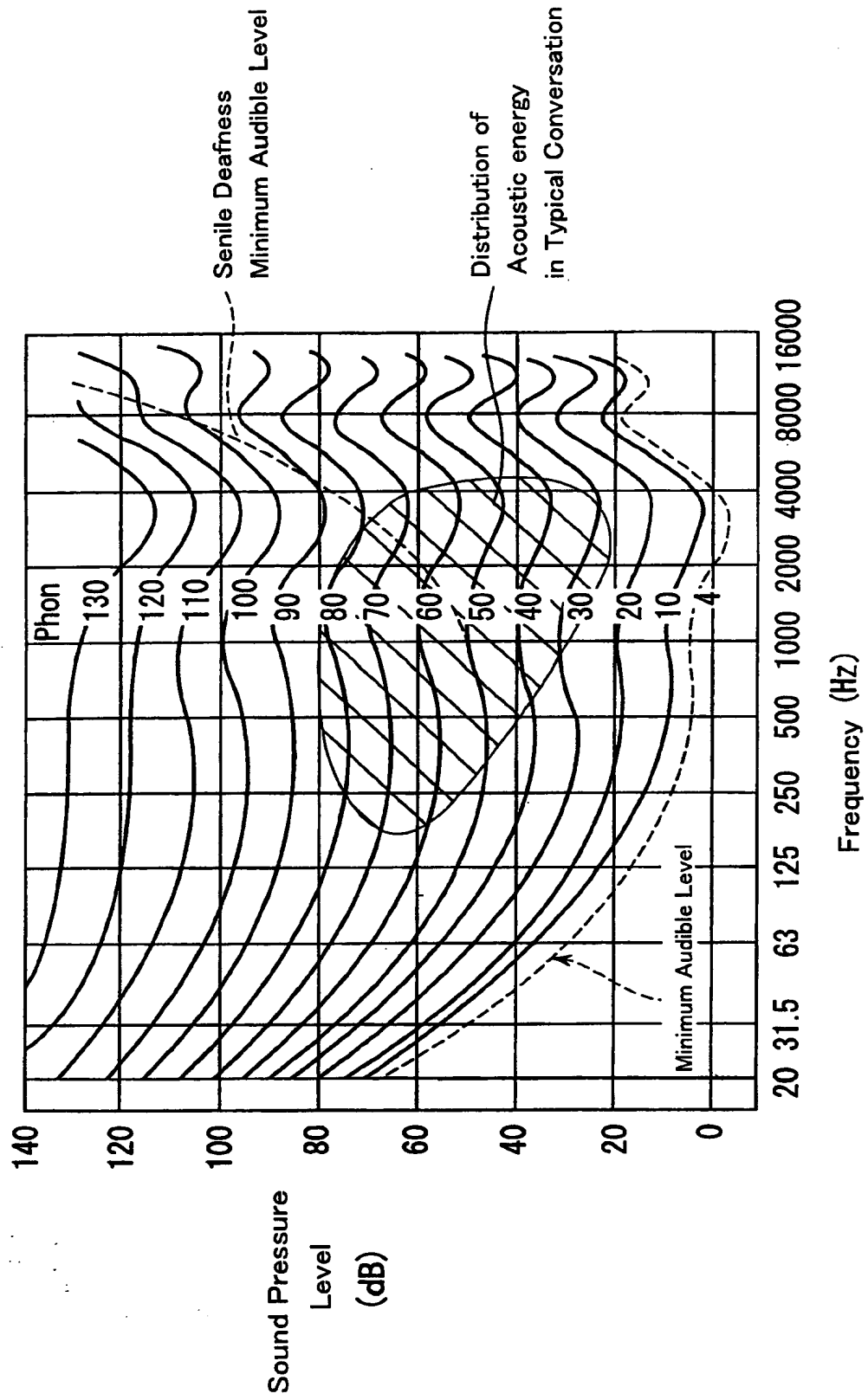


FIG. 8

Formants of Japanese Vowels

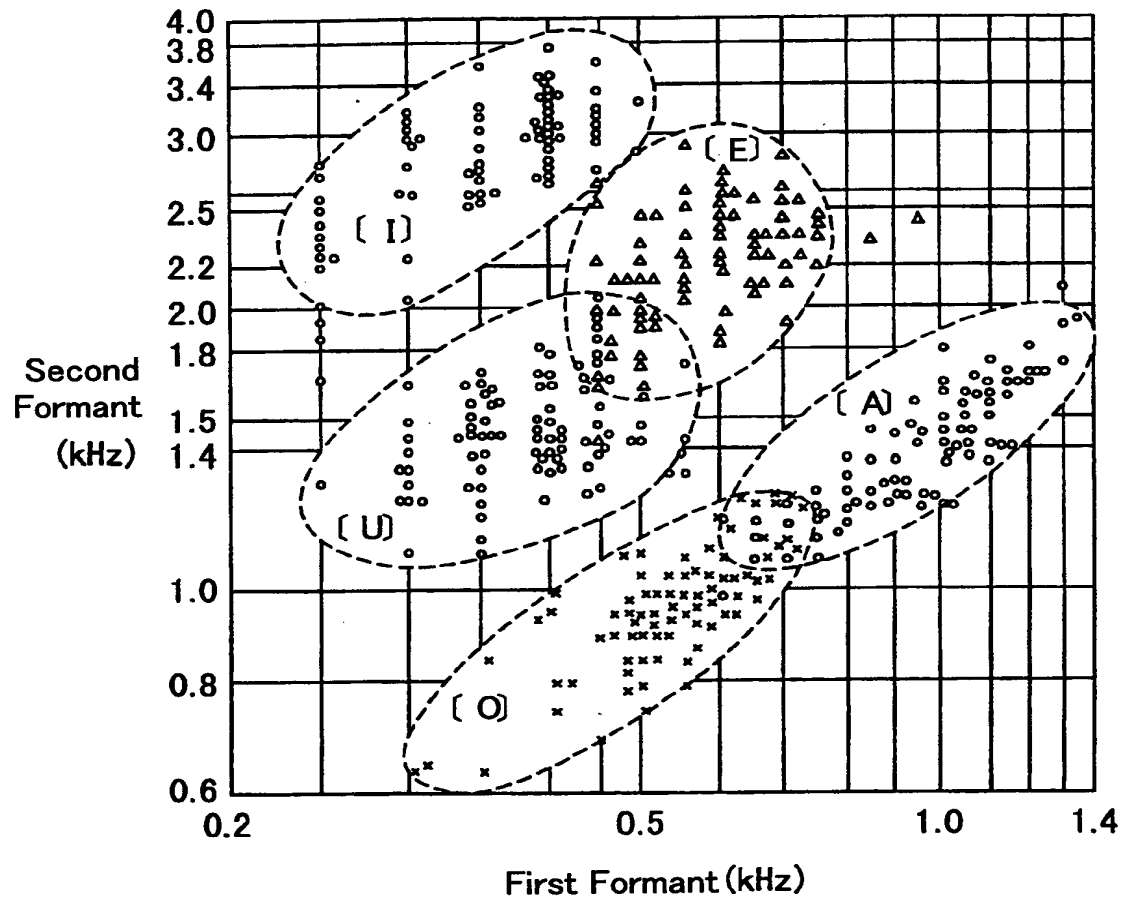


FIG. 9

	A	I	U	E	O
First Formant Frequency [kHz]	1.0	0.35	0.4	0.6	0.5
Second Formant Frequency [kHz]	1.5	2.7	1.4	2.5	1.0
Frequency Ratio	1.5	7.7	3.5	4.17	2.0